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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,367	04/19/2006	Mikael Nutsos	1510-1068-1	9487
466, 7590 YOUNG & THOMPSON 209 Madison Street Suite 500 Alexandria, VA 22314			EXAMINER FORD, JOHN K	
			ART UNIT 3784	PAPER NUMBER
			NOTIFICATION DATE 10/15/2010	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

# Office Action Summary

**Application No.**

10/576,367

**Applicant(s)**

NUTSOS, MIKAEL

**Examiner**

John K. Ford

**Art Unit**

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 July 2010.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-23 is/are pending in the application.  
4a) Of the above claim(s) 19-23 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 13-18 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SI/22)  
Paper No(s)/Mail Date 1/31/08 and 4/9/06  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

Applicant's election of Group I, a cleaning system (apparatus claims 13-18) without traverse in the response of 30 July 2010 is acknowledged. Applicant's earlier election of the fifth species of Figure 3 with the engine heat exchanger 325 omitted (as described on page 8, lines 25-29, but not separately illustrated) in the response of 19 April 2010 (also without traverse) is acknowledged. Applicant has identified all of claims 13-18 as readable on the elected species of Figure 3 with the engine heat exchanger 325 omitted (as described on page 8, lines 25-29 of the specification, but not separately illustrated).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant has elected for prosecution the species of Figure 3 with the engine heat exchanger 325 omitted (as described on page 8, lines 25-29 of the specification, but not separately illustrated). In this species, as disclosed on page 8, lines 25-29, the heating device may be the only source of heat in which case the heat exchanger 325 and the tubing system that connects the heat exchanger with the engines cooling system is omitted (emphasis supplied).

Claims 13-18 are extremely confusing to the examiner because claim 13 claims the means for heating (325) utilizing heat generated from the engine of the vehicle to heat the cleaning substance that does not exist in the elected species. Thus, none of claims 13-18 as currently written are readable on the elected species of Figure 3 with the engine heat exchanger 325 omitted (as described on page 8, lines 25-29 of the specification, but not separately illustrated).

If applicant feels that the examiner is in error on this point, please explain in detail how a claim that is purportedly readable on a particular species can claim an element that is explicitly disclosed not to exist in that species. Otherwise, applicant will have to amend claim 13 so that it is readable on the elected species. Apparently anticipating the examiner's confusion, counsel in the response of 30 July 2010 argues that the presence of heat exchanger 325 is not precluded in the species of Figure 3 with the engine heat exchanger 325 omitted (as described on page 8, lines 25-29 of the specification, but not separately illustrated) because there is no claim that recites, specifically, that 325 is not present. Be that as it may, an exercise in claim construction by counsel does not change the elected fifth species of Figure 3 with the engine heat exchanger 325 omitted (as described on page 8, lines 25-29 of the specification, but not separately illustrated) into the non-elected fourth species of Figure 3 with the engine heat exchanger 325 present.

Applicant had a full and fair opportunity to elect either variant in the office action mailed 19 February 2010. If applicant wanted the latter examined why did applicant elect the fifth species instead of the fourth species? Was this a simple mistake on

applicant's part or is the examiner missing something here? Do you wish to change your election to the fourth species of Figure 3 with the engine heat exchanger 325 present? If so, the examiner will permit this one time change at this juncture. Failure to make this change in the species election in response to this office action will be construed as a final election of the currently elected fifth species of Figure 3 with the engine heat exchanger 325 omitted (as described on page 8, lines 25-29 of the specification, but not separately illustrated) and no further change of the elected species will be permitted. Choose carefully.

Furthermore, claim 16 does not appear to be readable on the elected species of Figure 3 with the engine heat exchanger 325 omitted (as described on page 8, lines 25-29 of the specification, but not separately illustrated). Instead, claim 16 appears to be only readable on the non-elected eighth species (also not illustrated), as disclosed on page 12, lines 13-27 of the specification. Applicant had a full and fair opportunity to elect that species and did not. Therefore, claim 16 should either be designated as non-elected in any forthcoming response, amended to be descriptive of the elected species or cancelled.

Finally, claims 14-16 and 18 are dependent from a cancelled claim ("03"). The examiner has assumed for the rejections given below that these claims were meant to depend from claim 13.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of JP 2000-62456 and DE 4444255.

JP '456 discloses a cleaner that has a distribution tube 6 and a spray nozzle 15 that distributes a cleaning substance onto the surfaces of heat exchanger 16 characterized in that the cleaning system of JP '456 is mounted in a vehicle (see Figure 2) and has a means of heating 20 (a UV lamp inherently produces heat). The heating means of JP '456 is not connected to the engine coolant circulation system.

DE '255 teaches in the art of cleaning structures on a vehicle the use of engine coolant circulated through a heat exchanger ("Helzpatrone") that is immersed in a reservoir for the cleaning solution ("Vorat-Wasserbehälter") to heat that cleaning solution so that it will not freeze in the winter. The examiner would also add that hot cleaning solutions generally clean better than cold cleaning solutions as is well known, for example, when washing dinner dishes in hot water versus cold water. It general residue tends to dislodge more easily with hot water than with cold. On this assertion of conventional knowledge, see Matoba, USP 4,562,880, col. 1, lines 20-29 and col. 5, lines 60-63, incorporated here by reference. Matoba forms no part of the rejection here except to demonstrate common knowledge in the art of cleaning.

To have combined the teachings of JP '456 and DE '255 by placing the heat exchanger ("Helzpatrone") of DE '255 into the tank 5 of JP '456 would have been obvious to one of ordinary skill in the art. Alternatively, to have used the system of DE '255 to spray heated cleaning fluid on the surfaces of a heat exchanger mounted in the air conditioning unit and collecting the residue in a tank for reuse of the liquid would have been obvious from JP '456. The advantage of such modifications would have been to keep the cleaning solution from freezing in the winter (as explicitly taught by DE '255) as well as to improve the cleaning performance of the system as discussed by the examiner in the previous paragraph.

Claim 16, to the extent that it is descriptive of the elected species, is also rejected here. The elected species of Figure 3 with the engine heat exchanger 325 omitted (as described on page 8, lines 25-29 of the specification, but not separately illustrated) has no disclosure of a steam generating apparatus nor does JP '456 or DE '255.

Regarding claim 17, both the heat exchanger ("Helzpatrone") of DE '255 and the UV lamp 20 of JP '456 produce heat and therefore are two means for heating.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP '456/DE '255 as applied to claim 13-18 above, and further in view of Matoba (USP 4,562,890).

In col. 3, lines 6-30 of Matoba, incorporated here by reference, a prior art system is discussed that heats the washer liquid to the boiling point and therefore uses steam.

To have heated the fluid in JP '456/DE '255 to form steam as discussed in col. 3, lines 6-30 of Matoba, incorporated here by reference, to further improve the cleaning performance of JP '456/DE '255 would have been obvious to one of ordinary skill in the art.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP '456/DE '255 as applied to claim 13-18 above, and further in view of Linker et al (USP 4,575,003).

To have used a dual (coolant and electric) heater in JP '456/DE '255 as taught by Linker in Figure 5 (with Figures 1 and 5 of Linker establishing the art recognized equivalence of coolant heaters used alone, as in Linker Figure 1, and coolant heaters used in combination with electric heaters, as in Linker Figure 5) to advantageously augment the heating capability of the coolant heater of DE '255 to further improve cleaning would have been obvious to one of ordinary skill in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John K. Ford whose telephone number is 571-272-4911. The examiner can normally be reached on Mon.-Fri. 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John K. Ford/  
Primary Examiner, Art Unit 3744